

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 26/TT/2020

Coram:

**Shri P.K. Pujari, Chairperson
Shri I.S. Jha, Member
Shri Arun Goyal, Member**

Date of Order: 06.07.2020

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing-up of transmission tariff of the 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of 765 kV Line bays at Jabalpur Pooling Station for 765 kV D/C Gadawara STPS (NTPC)-Jabalpur Pooling Station TL under "POWERGRID Works associated with Part A of Transmission system for Gadawara STPS of NTPC" in Western Region.

And in the matter of:

Power Grid Corporation of India Limited,
"Saudamini", Plot No. 2,
Sector 29, Gurgaon-122001
(Haryana)

....Petitioner

Vs

1. Madhya Pradesh Power Management Company Limited
Shakti Bhawan, Rampur,
Jabalpur- 482008
2. Madhya Pradesh Power Transmission Company Limited
Shakti Bhawan, Rampur
Jabalpur- 482008
3. Madhya Pradesh Audyogik Kendra Vikash Nigam (Indore) Ltd.
3/54, Press Complex, Agra-Bombay Road,
Indore-452
4. Maharashtra State Electricity Distribution Co. Ltd
Hongkong Bank Building, 3rd Floor MG. Road, Fort,
Mumbai-400 001



5. Maharashtra State Electricity Transmission Limited
Prakashganga, 6th Floor, Plot No. C-19, E-Block,
BandraKurla Complex, Bandra (East)
Mumbai-400 051
6. Gujarat Urja Vikas Nigam Ltd.
Sardar Patel Vidyut Bhawan, Race Course Road,
Vadodara - 390 007
7. Electricity Department
Government of Goa, Vidyut Bhawan, Panaji,
Near Mandvi Hotel,
Goa - 403 001
8. Electricity Department,
Administration of Daman & Diu,
Daman - 396 210
9. DNH Power Distribution Corporation Limited.,
Vidyut Bhawan,
66 kV Road, Near Secretariat Amla,
Silvassa - 396 230
10. Chhattisgarh State Power Transmission Co. Ltd.,
Office of the Executive Director (C&P),
State Load Despatch Building, Dangania,
Raipur – 492 013
11. Chhattisgarh State Power Distribution Co. Ltd.,
P.O. Sunder Nagar, Dangania, Raipur,
Chhattisgarh-492 013
12. NTPC Ltd.,
NTPC Bhawan, Core-7, Scope Complex, 7,
Institutional Area, Lodhi Road,
New Delhi - 110003
13. POWERGRID Warora Transmission Limited,
400/220 kV Sub-station, Patan Road,
Vill.-Sulkha,
Jabalpur - 482002 (MP)

...Respondents

For Petitioner : Shri S. S. Raju, PGCIL
Shri A.K. Verma, PGCIL

For Respondents : None



ORDER

The present petition has been filed by Power Grid Corporation of India Ltd. (hereinafter referred to as “the Petitioner”) for trueing up of transmission tariff of 765 kV Line bays at Jabalpur Pooling Station for 765 kV D/C Gadarwara STPS (NTPC)-Jabalpur Pooling Station TL (hereinafter referred to as “transmission asset”) under "POWERGRID Works associated with Part A of Transmission system for Gadarwara STPS of NTPC" in Western Region”, (hereinafter referred to as “the transmission project”) for 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and tariff determination of the 2019-24 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”).

2. The Petitioner has made the following prayers in this petition: -

- “1) Allow the addcap for 2014-19 and 2019-24 tariff block as claimed as per Para 5.9 above.*
- 2) Approve the trueed up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 8.3 and 9.1 above.*
- 3) Allow the Petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before Hon’ble Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 9.1 and 10.1 above for respective block.*
- 4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.*
- 5) Allow the Petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the beneficiaries in terms of Regulation 70 (3) and (4) Central*



Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.

- 6) *Allow the Petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the beneficiaries.*
- 7) *Allow the Petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 9.7 above.*
- 8) *Allow the Petitioner to claim the capital spares at the end of tariff block as per actual.*
- 9) *Allow the Petitioner to bill and recover GST on Transmission Charges separately from the beneficiaries, if GST on transmission is withdrawn from negative list at any time in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.*

and pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.”

3. The Respondents are the transmission and distribution licensees, who are procuring transmission services from the Petitioner, mainly beneficiaries of the Western Region.

Background

4. The Investment Approval (IA) for implementation of “POWERGRID works associated with Part-A of Transmission System for Gadawara STPS of NTPC” in Western Region was accorded by the Board of Directors of the Petitioner in the 327th meeting held on April 2, 2016 for ₹4777 lakh including an IDC of ₹181 lakh based on October, 2015 price level (communicated vide Memorandum No.C/CP/IA/Gadawara Part-A dated 6.4.2016). The scope of work covered under the "POWERGRID Works associated with Part A of Transmission system for Gadawara STPS of NTPC" is as under:-

Sub-station:

765 kV Jabalpur Pooling Station (Powergrid) extension



(2 nos. 765 kV Line Bays)

(Gadarwara STPS (NTPC)-Jabalpur Pooling Station (PG) 765 kV D/C line - to be implemented through TBCB route)

5. As per the IA dated 2.4.2016, the instant transmission project was scheduled to be put into commercial operation within 14 months, i.e. by 1.6.2017. The instant asset was put into commercial operation on 31.5.2017. Thus, there is no time over-run.

6. The transmission tariff for the instant asset from its COD to 31.3.2019 was allowed vide order dated 10.10.2019 in Petition No. 250/TT/2017 as per the 2014 Tariff Regulations.

7. The Petitioner has served the petition on the Respondents and notice of this petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003 (hereinafter referred to as "the Act"). No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. M.P. Power Management Company Limited (MPPMCL) and Maharashtra State Electricity Distribution Company Limited (MSEDCL) have filed their reply vide affidavits dated 6.2.2020 and 7.2.2020, respectively. They have raised issues like grossing up of ROE, effect of GST, capital expenditure on PLCC and calculation of interest on loan. The Petitioner, vide its affidavits dated 4.5.2020 and 11.5.2020, has filed rejoinder to the reply of MPPMCL and MSEDCL, respectively. The hearing in this matter was held on 22.5.2020. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition.



TRUING UP OF ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

8. The Petitioner has submitted the information required under the 2014 Tariff Regulations for truing up of the annual fixed charges (AFC) in respect of the transmission asset allowed from COD to 31.3.2019 and has prayed for truing of the AFC under Regulation 8 of the 2014 Tariff Regulations. The tariff for the 2014-19 period has been trued up as discussed in the subsequent paragraphs.

9. The details of the transmission charges claimed by the Petitioner are as under: -

Particular	(₹ in lakh)	
	2017-18 (Pro-rata)	2018-19
Depreciation	79.81	123.47
Interest on Loan	73.54	109.06
Return on Equity	87.15	135.79
Interest on Working Capital	13.17	17.81
O&M Expenses	155.61	192.40
Total	409.28	578.53

10. The details of the Interest on Working Capital (IWC) claimed by the Petitioner are as under:-

Particular	(₹ in lakh)	
	2017-18 (Pro-rata)	2018-19
O&M Expenses	15.52	16.03
Maintenance Spares	27.93	28.86
Receivable	81.63	96.42
Total	125.08	141.31
Rate of Interest	12.60	12.60
Interest on Working Capital	13.17	17.81

Capital Cost

10. The Commission vide order dated 10.10.2019 in Petition No. 250/TT/2017 allowed capital cost of ₹1345.60 lakh as on COD and Additional Capital



Expenditure (ACE) of ₹1364.3 lakh from COD to 31.3.2019 in respect of the instant asset.

11. The Petitioner vide Auditor's Certificate dated 7.11.2019 has submitted the capital cost incurred up to COD, ACE from COD to 31.3.2019 and estimated ACE during the period from 1.4.2019 to 31.3.2020. The details of approved apportioned capital cost, capital cost as on COD and ACE incurred up to 31.3.2019 as claimed by the Petitioner for the instant transmission asset are as under:

Apportioned approved capital cost as per FR	Capital cost as on COD	Additional capitalisation (Claimed)		Total capital cost as on 31.3.2019 (Claimed)
		2017-18	2018-19	
4777.00	1376.19	806.85	215.88	2398.92

12. The completion cost including ACE in respect of the instant asset is within the FR approved apportioned capital cost as mentioned in Table under paragraph 11 above. Therefore, there is no cost over-run.

Interest During Construction (IDC):

13. The Petitioner has claimed IDC of ₹30.59 lakh for the instant asset and has submitted the Auditor's Certificate in support of the same. The Petitioner has submitted computation of IDC along with the year-wise details of the discharged IDC.

14. The allowable IDC has been worked out considering the information submitted by the Petitioner for the instant asset on cash basis. The loan details submitted in Form-9C for the 2014-19 period and the IDC computation sheet have been considered for the purpose of computation of IDC on cash and

accrued basis. The undischarged IDC as on COD has been considered as ACE during the year in which it has been discharged.

15. Accordingly, based on the information furnished by the Petitioner, the IDC considered is summarized as under:-

(₹ in lakh)					
IDC approved in order Dated 10.10.2019	IDC claimed by Petitioner (As per Auditor Certificate)	Entitled IDC up to COD	IDC disallowed as on COD due to computation difference	Undischarged portion of entitled IDC as on COD	IDC allowed on cash basis as on COD
	A	B	C= A-B	D	E=B-D
29.91	30.59	29.91	0.68	29.91	0.00

Incidental Expenditure During Construction (IEDC)

16. The Petitioner has claimed IEDC of ₹19.04 lakh and submitted Auditor's certificate in support of the same. The Petitioner has also submitted that the entire IEDC has been discharged as on COD in respect of the instant assets. The IEDC claimed is within the percentage of 10.75% on Hard Cost as indicated in the Abstract Cost Estimate, in respect of the instant asset. Hence, the IEDC claimed has been allowed.

Initial Spares

17. The Petitioner has claimed the following Initial Spares for the instant asset and prayed to allow the Initial Spares as per actuals.

Plant & machinery Cost up to cut-off date (excluding IDC and IEDC as per auditor certificate) (A)(₹ in lakh)	Initial Spares Claimed (B) (₹ in lakh)	Ceiling Limit (%) (C)
2397.09	136.86	6.0

18. We have considered the submissions of the Petitioner. The instant asset was put into commercial operation on 31.5.2017. Therefore, the cut-off date is 31.3.2020 and the capital cost up to the cut-off date has been considered for computation of Initial Spares. It has been observed that earlier the Petitioner vide Auditor's Certificate had claimed Initial Spares to the tune of ₹192.85 lakh and the same was not fully discharged up to COD whereas in the instant petition, the petitioner has reduced its claim of Initial Spares to ₹136.86 lakh without providing proper reasons for the difference. The claim of the Initial Spares under the instant petition is allowed. However, the petitioner is required to be more prudent while estimating and claiming expenditure projected to be incurred. The Petitioner's claim of Initial Spares for the instant assets is within the norms specified in the applicable Tariff Regulations and it is accordingly allowed as under:

Plant & machinery cost up to cut-off date (excluding IDC and IEDC as per Auditor certificate) (A) (₹ in lakh)	Initial Spares claimed (B) (₹ in lakh)	Ceiling Limit (%) (C)	Allowable Initial Spares worked out	Excess Initial Spares (₹ in lakh)	Initial Spares allowed (₹ in lakh)
			$D = [(A-B)*C / (100-C)]$		
2305.89	136.86	6.0	138.48	Nil	136.86

19. In order dated 10.10.2019 in Petition No. 250/TT/2017, the Petitioner had submitted that the Initial Spares were not discharged up to COD and not included in the cost as mentioned in the Auditor's certificate up to COD. Accordingly, based on the submission of the Petitioner, the discharge of Initial Spares during 2017-18 and 2018-19 were considered. In the instant petition, the Petitioner has claimed the same capital cost as on COD as admitted by the Commission in the order dated 10.10.2019 in Petition No. 250/TT/2017. Thus, it is evident that initial



Spares have not been discharged up to COD. Accordingly, following discharge position of initial spares have been considered:

Admissible Initial Spares	Initial Spares Discharged	
	2017-18	2018-19
136.68	134.99	1.86

(₹ in lakh)

Capital cost as on COD

20. Accordingly, the capital cost allowed as on COD is summarized as under:-

Capital cost as on COD as per Auditor Certificate	Less: IDC as on COD due to		Capital cost considered as on COD
	Computation difference	Un-discharged	
1376.19	0.68	29.91	1345.60

(₹ in lakh)

Additional Capital Expenditure (ACE)

21. The Petitioner has claimed ACE of ₹837.44 lakh, including IDC of ₹30.59 lakh discharged during 2017-18 and ₹215.88 lakh during 2018-19 for the instant asset. The Petitioner, vide affidavit dated 19.3.2020, has submitted that the ACE is mainly on account of balance and retention payments. The Additional Capitalization during 2017-18 and 2018-19 period for the instant asset has been claimed under Regulation 14(1)(i) (undischarged liabilities) of the 2014 Tariff Regulations and is within the cut-off the date.

22. The Petitioner has further submitted that ACE up to 31.3.2019 has been considered in the Auditor's certificate as per actuals whereas the ACE claimed for the period from 1.4.2019 to 31.3.2020 is on estimated basis and may vary due to final claim/ reconciliation at the time of contract closing.

23. MSEDCL has submitted that the Petitioner has projected an overall expenditure of ₹92.84 lakh as completion cost for PLCC/communication system.



This cost should be disallowed as PLCC/communication system is installed for the benefit of the Petitioner to have communication from one end to the other. In response, the Petitioner has submitted that PLCC system is meant for protection and data telemetry purpose which is an integral part of the transmission system under the present scope. The Petitioner has requested to consider the cost incurred against PLCC head in the capital cost and has prayed to allow the tariff as claimed.

24. We have considered the submissions of the Petitioner and MSEDCL. As PLCC/communication system is part of the transmission system under the present project, cost of the same shall be considered as part of the capital cost of the project.

25. The Petitioner has claimed ACE including the accrued IDC discharged during 2017-18 period. It is observed that total estimated completion cost including Additional Capitalization during 2017-18 to 2018-19 period is within the approved apportioned cost. However, as discussed at para 19 above, the Initial Spares discharge of ₹134.99 lakh and ₹1.86 lakh during 2017-18 and 2018-19 respectively, have been adjusted from the balance and retention payment allowed for the said period.

26. The ACE claimed by the Petitioner during 2017-18 and 2018-19 for the instant asset is within the cut-off date and the same has been allowed under Regulation 14(1)(i) and Regulation 14(1)(ii) of the 2014 Tariff Regulations as under:-



(₹ in lakh)

Particulars	Additional Capitalisation	
	2017-18	2018-19
ACE to the extent of Balance & Retention Payments and work deferred for execution other than Initial Spares and IDC	671.86	214.02
Add: Initial Spares Discharged	134.99	1.86
Add: IDC Discharged	29.91	0.00
Total ACE allowed	836.76	215.88

27. Accordingly, the capital cost considered for computation of tariff is as under:

(₹ in lakh)

Particular	Capital cost as on COD	Additional Capitalization		Total capital cost including additional capitalization as on 31.3.2019
		2017-18	2018-19	
Capital Cost allowed in this order	1345.60	836.76	215.88	2398.24

Debt-Equity Ratio

28. The Petitioner has considered debt-equity ratio as 70:30 as on COD and for Additional Capitalization post-COD. The debt-equity ratio of 70:30 as claimed by Petitioner in Form 6 has been considered for capital cost as on COD and for Additional Capitalization during 2017-18 and 2018-19 as provided under Regulation 19 of the 2014 Tariff Regulations. The details of the debt-equity ratio as on the date of COD and as on 31.3.2019 considered for the purpose of tariff computation for the 2014-19 tariff period is as follows:-

Asset-I	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	941.92	70.00	1678.77	70.00
Equity	403.68	30.00	719.47	30.00
Total	1345.60	100.00	2398.24	100.00



Interest on Loan (IOL)

29. The Petitioner has prayed for change in interest rates prevailing as on 1.4.2019 for respective loans. The change in interest rate is due to floating rate of interest applicable for the project to be claimed/adjusted over a 5year period directly from the beneficiaries.

30. MSEDCL has submitted that the Petitioner has considered the rate of interest on loan on annual basis for all the period under consideration which has major burden on the tariff of this control period.

31. We have considered the submissions of the Petitioner and the MSEDCL. The IOL is allowed based on the actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. The IOL has been worked out as detailed below:

- (i) Gross amount of loan, repayment of instalments, rate of interest and weighted average rate of interest on actual average loan have been considered as per the petition.
- (ii) The repayment for the 2014-19 tariff period has been considered to be equal to the depreciation allowed for that period.

32. The details of IOL allowed are as follows:-

Particular	₹ in lakh	
	2017-18 (Pro-rata)	2018-19
Gross Normative Loan	941.92	1527.65
Cumulative Repayments up to Previous Year	0.00	78.53
Net Loan-Opening	941.92	1449.13
Additions due to Additional Capitalization	585.73	151.12
Repayment during the year	78.53	121.90
Net Loan-Closing	1449.13	1478.35
Average Loan	1195.52	1463.74
Weighted Average Rate of Interest on Loan (%)	7.36	7.46
Interest on Loan	73.57	109.17



(₹ in lakh)

Particular	2017-18	2018-19
Allowed earlier in order dated 10.10.2019 in Petition No. 250/TT/2017	73.83	115.04
As claimed by the Petitioner	73.54	109.06
Approved in this order	73.57	109.17

33. The difference in IOL allowed in order dated 10.10.2019 in Petition No. 250/TT/2017 and that allowed after truing up in this order is on account of lower Additional Capital Expenditure and change in the weighted average rate of interest which is computed based on actual loan portfolio and rate of interest.

Return on Equity (ROE)

34. The Petitioner is entitled for ROE for the instant assets in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that they are liable to pay income tax at MAT rates and has claimed following effective tax rates for the 2014-19 tariff period:

Year	Claimed effective tax (%)	Grossed up ROE [Base Rate/(1-t)] (%)
2014-15	21.018	19.624
2015-16	21.382	19.715
2016-17	21.338	19.704
2017-18	21.337	19.704
2018-19	21.549	19.757

35. The Commission in order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate based on the notified MAT rates for the Petitioner and the same is given in the table below. The same MAT rates are considered for the purpose of grossing up of rate of ROE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations.



Year	MAT Rate (%)	Grossed up ROE [Base Rate/(1-t)] (%)
2014-15	20.961	19.610
2015-16	21.342	19.705
2016-17	21.342	19.705
2017-18	21.342	19.705
2018-19	21.549	19.758

36. MPPMCL and MSEDCL have submitted that the Petitioner has grossed up ROE on the basis of actual taxes paid during 2016-17 and 2017-18. During 2018-19, it has been grossed up on the basis of applicable rate of MAT, surcharge and cess. The Petitioner has not placed on record the assessment order for the period 2016-17 and 2017-18. Further, the Petitioner has not claimed grossed up ROE on the basis of actual taxes paid for the year 2018-19. The Respondents have further submitted that the Petitioner has neither submitted copy of assessment order for the 2014-15 and 2015-16 period nor the audited accounts in respect of actual taxes paid during 2016-17 and 2017-18. In the absence of these essential documents, it is not possible to scrutinize the claim of the Petitioner in a proper way.

37. In response, the Petitioner has submitted that the income tax assessment order has been issued by the Income Tax Department for 2014-15, 2015-16 and 2016-17 and that the Income Tax returns have been filed with the Income Tax Department for the years 2017-18 and 2018-19. The basis of year-wise effective tax rate has been mentioned in the petition and grossed up ROE has been trued up accordingly for the 2014-19 period. The Petitioner has further submitted that the assessment orders of 2014-15 and 2015-16 have already been submitted in the TV (technical validation) reply in Petition No.20/TT/2020 and has placed on record a copy of the assessment order for the year 2016-17.



38. We have considered the submissions of the Petitioner and the Respondents. We have also perused the documents available on record. The ROE allowed for the instant assets is as follows:

(₹ in lakh)		
Particulars	2017-18 (Pro-rata)	2018-19
Opening Equity	403.68	654.71
Addition due to Additional Capitalization	251.03	64.76
Closing Equity	654.71	719.47
Average Equity	529.19	687.09
Return on Equity (Base Rate) (%)	15.5	15.5
Tax Rate applicable (%)	21.34	21.55
Rate of Return on Equity (Pre-tax)(%)	19.705	19.758
Return on Equity (Pre-tax)	87.14	135.75

(₹ in lakh)		
Particular	2017-18 (Pro-rata)	2018-19
Allowed earlier in order dated 10.10.2019 in Petition No. 250/TT/2017	89.01	146.65
As claimed by the Petitioner	87.15	135.79
Approved in this order	87.14	135.75

The ROE allowed in the instant order is less than the ROE allowed vide order dated 10.10.2019 in Petition No. 250/TT/2017 due to decrease in equity on account of lower Additional Capitalisation and change in the applicable MAT rate for the purpose of grossing up of base rate of ROE.

Depreciation

39. The Petitioner has claimed depreciation considering capital expenditure of ₹1345.60 lakh on COD and Additional Capitalization of ₹1052.64 lakh (including IDC discharged during 2017-18).

40. We have considered the submission of the Petitioner. It is observed that in Petition No. 250/TT/2017, where tariff was determined for the instant asset for the 2014-19 tariff block, the Petitioner had submitted capital cost of IT equipment



in sub-station cost and, therefore, depreciation for IT equipment was allowed @5.28% of corresponding capital cost. The Petitioner now at the time of truing up of tariff of the 2014-19 period has segregated the IT equipment cost from sub-station cost and has considered depreciation rate for IT Equipment @15% and the salvage value for "IT Equipment" as NIL as per the 2014 Tariff Regulations. It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" @15% at the time of truing up of the tariff of the 2014-19 period. Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including the additional capital expenditure, incurred up to 31.3.2019, admitted by the Commission after prudence check. We are of the view that scope of truing up exercise is restricted to truing up of the capital expenditure already admitted and apportionment or reapportionment of the capital expenditure cannot be allowed at the time of truing up. Therefore, we are not inclined to consider the Petitioner's prayer for apportionment of capital expenditure towards IT Equipment and allowing depreciation @15% from 1.4.2014 onwards. Accordingly, depreciation @5.28% has been considered for IT Equipment as part of the sub-station up to 31.3.2019 while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations.

41. The Gross Block during the tariff period 2014-19 has been depreciated at weighted average of depreciation (WAROD) and working of WAROD is at



Annexure-I. The weighted average of depreciation (WAROD) has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and depreciation allowed during 2017-18 and 2018-19 is as under:

(₹ in lakh)		
Particular	2017-18 (pro-rata)	2018-19
Particular	2017-18 (pro-rata)	2018-19
Opening Gross Block	1345.60	2182.36
Addition during the year 2014-19 due to Additional Capitalisation	836.76	215.88
Closing Gross Block	2182.36	2398.24
Average Gross Block	1763.98	2290.30
Weighted average rate of Depreciation (%) (WAROD)	5.327%	5.323%
Balance useful life at the beginning of the year	25	25
Aggregated Depreciable Value	1589.14	2062.84
Combined Depreciation during the year	78.53	121.90
Remaining Aggregated Depreciable Value	1589.14	1984.32

(₹ in lakh)		
Particular	2017-18	2018-19
Allowed earlier in order dated 10.10.2019 in Petition No. 250/TT/2017	80.67	132.91
As claimed by the Petitioner	79.81	123.47
Approved in this order	78.53	121.90

The depreciation allowed in the instant order is lower than the depreciation allowed vide order dated 10.10.2019 in Petition No. 250/TT/2017 due to lower Additional Capital Expenditure.

Operation & Maintenance Expenses (O&M Expenses)

42. The O&M Expenses claimed by the Petitioner and allowed as per Regulation 29(4)(a) of the 2014 Tariff Regulations for purpose of computation of tariff are the same and are as under:

(₹ in lakh)		
Particulars	2017-18	2018-19
Norm (₹ lakh/bay)		
765 kV Bay	93.11	96.2
Number of bays		
765 kV Bay	2	2
Total O&M Expense (Claimed)	155.61	192.4
Total O&M Expense (Approved)	155.61	192.4

Interest on Working Capital (IWC)

43. The Petitioner is entitled to claim IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations as under:-

(i) **Maintenance spares:**

Maintenance spares have been worked out based on 15% of Operation and Maintenance Expenses.

(ii) **O & M Expenses:**

O&M Expenses have been considered for one month of the allowed O&M Expenses.

(iii) **Receivables:**

The receivables have been worked out on the basis of 2 months of annual transmission charges as worked out above.

(iv) **Rate of IWC:**

Rate of IWC is considered on normative basis in accordance with Clause (3) of Regulation 28 of the 2014 Tariff Regulations.

44. The IWC allowed for the instant asset is as under:-

(₹ in lakh)		
Particulars	2017-18 (Pro-rata)	2018-19
O & M Expenses	15.52	16.03
Maintenance Spares	27.93	28.86
Receivables	81.37	96.17
Total Working Capital	124.82	141.06
Rate of Interest (%)	12.60	12.60
Interest of working capital	13.14	17.77

Accordingly, the IWC claimed by the Petitioner, allowed and trued up in respect of the instant asset is shown in the table below:

Particulars	(₹ in lakh)	
	2017-18	2018-19
Allowed earlier in order dated 10.10.2019 in Petition No. 250/TT/2017	13.23	18.37
As claimed by the Petitioner in instant petition	13.17	17.81
Allowed after truing-up	13.14	17.77

APPROVED ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

45. The annual transmission charges allowed for the 2014-19 tariff period after truing up are as under:

Particulars	(₹ in lakh)	
	2017-18 (Pro-rata)	2018-19
Depreciation	78.53	121.90
Interest on Loan	73.57	109.17
Return on Equity	87.14	135.75
Int. on Working Capital	13.14	17.77
Op. and Maintenance	155.61	192.40
Total	407.98	577.00

The Annual Transmission Charges allowed vide order dated 10.10.2019 in Petition No. 250/TT/2017; claimed in the instant petition for the 2014 -19 period; and allowed after true up for the 2014-19 period are as under:

Particulars	(₹ in lakh)	
	2017-18	2018-19
Allowed earlier in order dated 10.10.2019 in Petition No. 250/TT/2017	412.34	605.37
As claimed by the Petitioner in instant petition	409.28	578.53
Allowed after truing-up	407.98	577.00

The difference between the Annual Transmission Charges allowed vide order dated 10.10.2019 in Petition No. 250/TT/2017 and approved in this order is on account of lower actual expenditure by the Petitioner.

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2019-24 TARIFF PERIOD

46. The Petitioner has claimed the following transmission charges for the instant transmission asset for the 2019-24 tariff period:-

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	130.62	132.08	132.08	132.08	132.05
Interest on Loan	107.82	99.18	90.62	83.92	73.20
Return on Equity	136.74	138.32	138.32	138.32	138.32
Interest on Working Capital	9.65	9.72	9.73	9.78	9.75
O & M Expenses	91.88	95.06	98.32	101.72	105.22
Total	476.71	474.36	469.07	465.82	458.54

47. The Petitioner has claimed the following IWC for the 2019-24 tariff period:-

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	7.66	7.92	8.19	8.48	8.77
Maintenance Spares	13.78	14.26	14.75	15.26	15.78
Receivables	58.61	58.48	57.83	57.43	56.38
Total	80.05	80.66	80.77	81.17	80.93
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	9.65	9.72	9.73	9.78	9.75

Capital Cost

48. Regulation 19(3) of the 2019 Tariff Regulations provides as follows: -

“19. Capital Cost

(3) The Capital cost of an existing project shall include the following:

- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*
- (b) Additional Capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
- (c) Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;*
- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (e) Capital expenditure incurred towards railway infrastructure and its*



augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
(f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.”

49. The Petitioner vide Auditor’s Certificate dated 7.11.2019 has claimed the following capital cost including ACE projected to be incurred during the year 2019-20:-

(₹ in lakh)			
Apportioned capital cost (FR)	Capital cost claimed as on 31.3.2019	Additional capitalisation (claimed)	Total capital cost as on 31.3.2019 (claimed)
		2019-24	
4777.00	2398.92	55.89	2454.81

50. Against the overall apportioned approved capital cost (as per FR) of ₹4777 lakh, the estimated completion cost including ACE is ₹2454.81 lakh. Therefore, there is no cost over-run.

51. The capital cost has been dealt as per clause (3) of Regulation 19 of the 2019 Tariff Regulations. The admitted capital cost of ₹2398.24 lakh (i.e. Land, Building, Transmission Line, Sub-station and PLCC) as on 31.3.2019 has been considered as capital cost as on 1.4.2019. The trued-up capital cost of ₹2398.24 lakh is considered as admitted capital cost as on 1.4.2019 for working out tariff for 2019-24 tariff period.

Additional Capital Expenditure

52. Regulation 24 of the 2019 Tariff Regulations provides as under:

“24. Additional Capitalization within the original scope and up to the cut-off date

(1) The Additional Capital Expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the



original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

- (a) Undischarged liabilities recognized to be payable at a future date;*
- (b) Works deferred for execution;*
- (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;*
- (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;*
- (e) Change in law or compliance of any existing law; and*
- (f) Force Majeure events:*

Provided that in case of any replacement of the assets, the additional capitalization shall be worked out after adjusting the gross fixed assets and cumulative depreciation of the assets replaced on account of de-capitalization.

(2) The generating company or the transmission licensee, as the case may be shall submit the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution.”

53. The Petitioner has claimed projected ACE of ₹55.89 lakh during 2019-24 period and submitted Auditor's certificates in support of the same.

54. The Petitioner in the petition and vide affidavit dated 19.3.2020 has submitted that the Additional Capitalization in case of the instant asset is on account of undischarged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date. The Additional Capitalization during the year 2019-20 for the instant asset has been claimed under Regulation 24(1)(a) of the 2019 Tariff Regulations. The Petitioner has also submitted details of underlying reasons for additional capitalization in Form-7.

55. MSEDCL has submitted that the Petitioner has claimed projected Additional Capitalization of ₹55.89 lakh during 2019-20 without giving proper details and justification for the same. Therefore, the same may be considered in the truing up for the 2019-24 period. In response, the Petitioner



has submitted that estimated Additional Capitalization for ₹55.89 lakh has been claimed during 2019-20 under Regulation 24(1)(a) of the 2019 Tariff Regulations for balance and retention payment and works deferred for execution for Building and Civil works, Sub-station, PLCC and IT equipment. The Petitioner has prayed to allow the same.

56. We have considered the submission of the Petitioner and MSEDCL. Since the Petitioner has claimed ₹55.89 lakh during 2019-20 under Regulation 24(1)(a) of the 2019 Tariff Regulations towards balance and retention payment and works deferred for execution for Building and Civil works, Sub-station, PLCC and IT equipment, which is within the cut-off date, the same is allowed.

57. It is observed that the projected Additional Capitalization falls within the cut-off date in the instant petition. The Petitioner is directed to submit details of contracts, scope, original liability and undischarged liability as on 31.3.2019 and the regulation under which such Additional Capitalization is claimed at the time of true up of the tariff of the 2019-24 period. The ACE allowed is summarized hereunder, which is subject to true up:-

Particulars	Regulation	Admitted additional capital expenditure (2019-20) (₹ in lakh)
ACE to the extent of Balance & Retention Payments & work deferred for execution before cut-off date	Regulation 24(1)(a) of the 2019 Tariff Regulations	55.89

Capital Cost

58. The capital cost of the instant asset considered for determination of the tariff for the 2019-24 period is as under:



(₹ in lakh)		
Capital cost allowed as on 1.4.2019	ACE allowed during the year 2019-20	Total estimated completion cost up to 31.3.2024
2398.24	55.89	2454.13

Debt-Equity Ratio

59. Regulation 18(3), (4) and (5) of the 2019 Tariff Regulations provides as under: -

“18. Debt-Equity Ratio: (3). In case of the generating station and the transmission project including communication, project declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

Provided that in case of a generating station or a transmission project including communication project which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30% shall not be taken into account for tariff computation;

Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

(4). In case of the generating station and the transmission project including communication project declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5). Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as Additional Capital Expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.”

60. The details of the debt-equity ratio considered for the purpose of computation of tariff for the 2019-24 tariff period is as follows: -

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	(%)	Total Capital Cost as on 31.3.2024 (₹ in lakh)	(%)
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Debt	1678.77	70.00	1717.89	70.00
Equity	719.47	30.00	736.24	30.00
Total	2398.24	100.00	2454.13	100.00

Return on Equity (ROE)

61. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provide as under:-

“30. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission project including communication project and run-of-river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of-river generating station with pondage:

Provided that return on equity in respect of Additional Capitalization after cut-off date beyond the original scope excluding Additional Capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission project;

Provided further that:

i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission project is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication project up to load dispatch centre or protection project based on the report submitted by the respective RLDC;

ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;

iii. in case of a thermal generating station, with effect from 1.4.2020:

- a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;*
- b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:*

Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019.



31. *Tax on Return on Equity: (1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.*

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

Where “t” is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis.”

62. The Petitioner has submitted that MAT rate is applicable to the Petitioner company. Accordingly, the MAT rate applicable during the 2019-20 has been considered for the purpose of ROE, which shall be trued up with actual tax rate in accordance with Clause (3) of Regulation 31 of the 2019 Tariff Regulations. The ROE allowed for the instant transmission asset under Regulation 30 of the 2019 Tariff Regulations is as under:-

(₹ in lakh)



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	719.47	736.23	736.23	736.23	736.23
Addition due to Additional Capitalization	16.77	0.00	0.00	0.00	0.00
Closing Equity	736.23	736.23	736.23	736.23	736.23
Average Equity	727.85	736.23	736.23	736.23	736.23
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
Tax Rate applicable (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
Return on Equity (Pre-tax)	136.70	138.28	138.28	138.28	138.28

Interest on Loan (IOL)

63. Regulation 32 of the 2019 Tariff Regulations provides as under: -

“32. Interest on loan capital: (1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered up to the date of de-capitalisation of such asset.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year. (5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered;

Provided further that if the generating station or the transmission project, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

(7) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing”.

64. The weighted average rate of IOL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. In view of above, the IOL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. The IOL allowed is follows:-

(₹ in lakh)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	1678.77	1717.90	1717.90	1717.90	1717.90
Cumulative Repayments up to Previous Year	200.43	331.01	463.05	595.09	727.13
Net Loan-Opening	1478.35	1386.88	1254.85	1122.81	990.77
Addition due to Additional Capitalization	39.12	0.00	0.00	0.00	0.00
Repayment during the year	130.58	132.04	132.04	132.04	132.04
Net Loan-Closing	1386.88	1254.85	1122.81	990.77	858.73
Average Loan	1432.61	1320.87	1188.83	1056.79	924.75
Weighted Average Rate of Interest on Loan (%)	7.539	7.522	7.638	7.960	7.938
Interest on Loan	108.00	99.36	90.81	84.12	73.40

Depreciation

65. Regulation 33(1), (2) and (5) of the 2019 Tariff Regulations provide as under:-

“33. Depreciation: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission project or element thereof including communication project. In case of the tariff of all the units of a generating station or all elements of a transmission project including communication project for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of



the generating station or the transmission project taking into consideration the depreciation of individual units:

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission project, for which single tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission project, weighted average life for the generating station of the transmission project shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the assets of the generating station and transmission project:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.”

66. The IT equipment has been considered as a part of the Gross Block and depreciated using weighted average rate of depreciation (WAROD). The weighted average of depreciation (WAROD) has been worked out (Annexure-II) after taking into account the depreciation rates of IT and non IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e. IT asset has been considered as 100 per cent depreciable. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation allowed for the instant asset is as follows:-

(₹ in lakh)

Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	2398.24	2454.13	2454.13	2454.13	2454.13
Addition during the year 2019-24 due to projected Additional Capitalisation	55.89	0.00	0.00	0.00	0.00
Closing Gross Block	2454.13	2454.13	2454.13	2454.13	2454.13
Average Gross Block	2426.19	2454.13	2454.13	2454.13	2454.13
Weighted average rate of Depreciation (%) (WAROD)	5.38	5.38	5.38	5.38	5.38



Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Balance useful life at the beginning of the year	24.00	23.00	22.00	21.00	20.00
Aggregated Depreciable Value	2185.20	2210.41	2210.41	2210.41	2210.41
Combined Depreciation during the year	130.58	132.04	132.04	132.04	132.04
Remaining Aggregated Depreciable Value	1984.77	1879.39	1747.36	1615.32	1483.28

Operation & Maintenance Expenses (O&M Expenses)

67. Regulation 35(3) and (4) of the 2019 Tariff Regulations provides as under:

“35 (3) Transmission system: (a) The following normative operation and maintenance expenses shall be admissible for the transmission system:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<i>Norms for sub-station Bays (₹ Lakh per bay)</i>					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
<i>Norms for Transformers (₹ Lakh per MVA)</i>					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
<i>Norms for AC and HVDC lines (₹ Lakh per km)</i>					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
<i>Norms for HVDC stations</i>					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<i>500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500)</i>	2,252	2,331	2,413	2,498	2,586
<i>±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000)</i>	2,468	2,555	2,645	2,738	2,834
<i>±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500)</i>	1,696	1,756	1,817	1,881	1,947
<i>±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh)</i>	2,563	2,653	2,746	2,842	2,942

Provided that the O&M expenses for the GIS bays shall be allowed as worked out by multiplying 0.70 of the O&M expenses of the normative O&M expenses for bays;

(b) The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of sub-station bays, transformer capacity of the transformer (in MVA) and km of line length with the applicable norms for the operation and maintenance expenses per bay, per MVA and per km respectively.

(c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:

Provided that the transmission licensee shall submit the assessment of the security requirement and estimated security expenses, the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification.

(4) Communication system: The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up.”

68. The O&M Expenses claimed and allowed for the instant asset are the same and are as follows:-

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses claimed	91.88	95.06	98.32	101.72	105.22
O&M Expenses approved	91.88	95.06	98.32	101.72	105.22

Interest on Working Capital (IWC)

69. Regulation 34(1)(c), (3) and (4) and Clause (7) of Regulation 3 of the 2019 Tariff Regulations specify as follows:-



“34. Interest on Working Capital: (1) The working capital shall cover:

(c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission Project:

(i) Receivables equivalent to 45 days of annual fixed cost;

(ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and

(iii) Operation and maintenance expenses, including security expenses for one month.”

“(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission project including communication project or element thereof, as the case may be, is declared under commercial operation, whichever is later:

Provided that in case of truing-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24.

(4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency.”

“3. **Definition** - In these regulations, unless the context otherwise requires: -

(7) ‘**Bank Rate**’ means the one year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;”

70. The Petitioner has submitted that it has computed IWC for 2019-24 period considering the bank rate as on 1.4.2019.

71. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05%. The components of the working capital and interest thereon have been worked out as follows: -

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses	7.66	7.92	8.19	8.48	8.77
Maintenance Spares	13.78	14.26	14.75	15.26	15.78
Receivables	58.62	58.49	57.84	57.44	56.40
Total	80.06	80.67	80.78	81.18	80.95
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest of working capital	9.65	9.72	9.73	9.78	9.75



Annual Fixed Charges for the 2019-14 Tariff Period

72. The annual fixed charges for the instant asset for the tariff period 2019-24 are summarized below:-

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	130.58	132.04	132.04	132.04	132.04
Interest on Loan	108.00	99.36	90.81	84.12	73.40
Return on Equity	136.70	138.28	138.28	138.28	138.28
Interest on Working Capital	9.65	9.72	9.73	9.78	9.75
Operation and Maintenance	91.88	95.06	98.32	101.72	105.22
Total	476.81	474.45	469.17	465.94	458.69

Filing Fee and Publication Expenses

73. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses in terms of Clause (1) of Regulation 70 of the 2019 Tariff Regulations. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition directly from the beneficiaries on pro-rata basis in accordance with Clause (1) of Regulation 70 of the 2019 Tariff Regulations.

Licence Fee and RLDC Fees and Charges

74. The Petitioner has requested to allow it to bill and recover license fee and RLDC fees and charges, separately from the Respondents. The Petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Clause (4) and (3) respectively of Regulation 70 of the 2019 Tariff Regulations.



Goods and Services Tax

75. The Petitioner has sought to recover GST on transmission charges separately from the Respondents, if GST on transmission is withdrawn from negative list in future. MPPMCL and MSEDCL have submitted that the GST is not applicable on transmission and distribution of electricity and hence, this prayer is pre-mature.

76. We have considered the submission of the Petitioner and the Respondents. GST is not levied on transmission service at present and we are of the view that Petitioner's prayer is premature and the Petitioner is at liberty to approach the Commission if GST is levied in future.

Security Expenses

77. The Petitioner has submitted that security expenses for the instant assets are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential Interest on Working Capital. The Petitioner has requested to consider the actual security expenses incurred during 2018-19 for claiming estimated security expenses for 2019-20 which shall be subject to true up at the end of the year based on the actuals. The Petitioner has submitted that similar petition for security expenses for 2020-21, 2021-22, 2022-23 and 2023-24 shall be filed on a yearly basis on the basis of the actual expenses of previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that the difference, if any, between the estimated security expenses and actual security expenses as per the duly audited accounts may be allowed to be recovered from the beneficiaries on yearly basis. We have considered the submissions of the Petitioner. Any



application filed by the Petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2019 Tariff Regulations.

Capital Spares

78. The Petitioner has sought reimbursement of capital spares at the end of tariff period. The Petitioner's claim, if any, shall be dealt with in accordance with the provisions of the 2019 Tariff Regulations.

Sharing of Transmission Charges

79. As per the Commission's order dated 10.10.2019 in Petition No. 250/TT/2017, the transmission charges of the instant asset shall be borne by NTPC from its COD, i.e., 31.5.2017 to 31.5.2019. The billing, collection and disbursement of the transmission charges w.e.f. 1.6.2019 shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time as provided in Regulation 57 of the 2019 Tariff Regulations.

80. This order disposes of Petition No. 26/TT/2020.

**sd/-
(Arun Goyal)
Member**

**sd/-
(I.S. Jha)
Member**

**sd/-
(P. K. Pujari)
Chairperson**



(Rs. in Lacs)

Capital Expenditures as on COD / 01.04.2014	Admitted Capital Cost as on 1.4.2014.	Additional capitalisation			Admitted Capital Cost as on 31.3.2019	Rate of Depreciation as per Regulation 27	Depreciation as per Regulation	
		2017-18	2018-19	Total			2017-18	2018-19
Freehold Land	-	-	-	-	-	-	-	-
Leasehold Land	-	-	-	-	-	3.34%	-	-
Building & Other Civil Works	-	-	-	-	-	3.34%	-	-
Transmission Line	-	-	-	-	-	5.28%	-	-
Sub-Station Equipments	1,263.74	810.08	215.88	1,025.96	2,289.70	5.28%	88.11	115.20
PLCC	66.47	26.34	-	26.34	92.81	6.33%	5.04	5.87
IT equipment and software	15.39	0.34	-	0.34	15.73	5.28%	0.82	0.83
Total	1,345.60	836.76	215.88	1,052.64	2,398.24		93.97	121.90
					Gross block		1,763.98	2,290.30
					Weighted Average Rate of Depreciation		5.327%	5.323%

(Rs. in Lacs)

Capital Expenditure	Combined Admitted Capital Cost as on 01.04.2019	Projected Additional Capitalisation						Admitted Cost as 31.3.2019	Rate of Depreciation as per Regulation	Depreciation as per Regulation				
		2019-20	2020-21	2021-22	2022-23	2023-24	Total			2019-20	2020-21	2021-22	2022-23	2023-24
Freehold Land	-	-	-	-	-	-	-	-	0.00%	0.00	0.00	0.00	0.00	0.00
Leasehold Land	-	-	-	-	-	-	-	-	3.34%	0.00	0.00	0.00	0.00	0.00
Building & Other Civil Works	-	8.08	-	-	-	-	8.08	8.08	3.34%	0.13	0.27	0.27	0.27	0.27
Transmission Line	-	-	-	-	-	-	-	-	5.28%	0.00	0.00	0.00	0.00	0.00
Sub-Station Equipments	2289.70	46.65	0.00	0.00	0.00	0.00	46.65	2336.35	5.28%	122.13	123.36	123.36	123.36	123.36
PLCC	92.81	0.00	0.00	0.00	0.00	0.00	0.00	92.81	6.33%	5.87	5.87	5.87	5.87	5.87
IT and Software	15.73	1.16	0.00	0.00	0.00	0.00	1.16	16.89	15.00%	2.45	2.53	2.53	2.53	2.53
Total	2398.24	55.89	0.00	0.00	0.00	0.00	55.89	2454.13		130.58	132.04	132.04	132.04	132.04
								Gross Block		2426.19	2454.13	2454.13	2454.13	2454.13
								Weighted Average Rate of Depreciation		5.38%	5.38%	5.38%	5.38%	5.38%